

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Original) An antenna for a radio terminal device comprising:
 - (a) an antenna element;
 - (b) and an antenna characteristic switching section for switching between the states in which a current distribution exists only on and in the vicinity of the antenna element and in which a current distribution exists not only on and in the vicinity of the antenna element but also on the other portions.
2. (Currently Amended) An antenna for a radio terminal device ~~comprising:~~
according to claim 1, wherein the antenna element is connected with a conductive substrate
 - ~~(a) an antenna element;~~
 - ~~(b) a conductive substrate arranged close in parallel to the long side of the antenna element with a sufficiently small spacing as compared with the wavelength in a twisted position relationship;~~
 - ~~(c) and an antenna characteristic switching section, being connected to one end of the antenna element in the vicinity of the conductive substrate, for changing the state of continuity with the conductive substrate.~~
3. (Currently Amended) An antenna for a radio terminal device according to claim ~~21~~, wherein the antenna characteristic switching section has either of a switch and a diode, and a coil connected each other in series ~~and one end of the coil is connected to the antenna element.~~
4. (Cancelled)

5. (Previously Presented) An antenna for a radio terminal device according to claim 1, wherein any one of a loop antenna, dipole antenna, and diversity antenna is used as the antenna element.

6. (Previously Presented) An antenna for a radio terminal device according to claim 1, wherein the antenna element is a dipole antenna and also an array antenna configured by two antenna elements.

7. (Previously Presented) A radio terminal device comprising:

(a) an antenna for a radio terminal device comprising;

(1) an antenna element;

(2) and an antenna characteristic switching section for switching between the states in which a current distribution exists only on and in the vicinity of the antenna element and in which a current distribution exists not only on and in the vicinity of the antenna element but also on the other portions;

(b) and a RF circuit section connected to the other end of the antenna element.

8. (Currently Amended) A radio terminal device ~~comprising~~according to claim 7,
wherein

~~(a) — an~~the antenna element;~~is connected with~~ ~~(b) — a~~ conductive substrate arranged close in parallel to the long side of the antenna element with a sufficiently small spacing as compared with the wavelength in a twisted position relationship;

~~(c) — a RF circuit section connected to one end of the antenna element;~~

~~(d) — and an~~the antenna characteristic switching section ~~which is connected to the portion in the vicinity of the end connected with the RF circuit section and in proximity to the one end of the antenna element in the vicinity of the conductive substrate, for changing the state of continuity with the conductive substrate,~~

~~wherein the other end of the antenna element in proximity to the conductive substrate is connected to the conductive substrate.~~

9. (Currently Amended) A radio terminal device comprising:

- (a) an antenna element;
- (b) a conductive substrate arranged close in parallel to the long side of the antenna element with a sufficiently small spacing as compared with the wavelength in a twisted position relationship;
- (c) a balanced/unbalanced converter connected to both ends of the antenna element;
- (d) a RF circuit section connected to said antenna element through said balanced/unbalanced converter;
- (e) and an antenna characteristic switching section being connected to the antenna element in the vicinity of the conductive substrate, for changing the state of continuity with the conductive substrate.

10. (Previously Presented) A radio terminal device according to claim 7, further comprising:

- (a) an operating pattern estimator for discriminating whether the present communication media is a telephone call or a data communication, to notify the antenna characteristic switching section,

wherein the antenna characteristic switching section performs a predetermined switching on the basis of the notification.

11. (Currently Amended) A radio terminal device according to claim 7, further comprising:

- (a) a propagation environment estimator for detecting a received power, ~~or a~~ polarization of an arrival radio wave ~~and or a~~ direction of an arrival radio wave, to notify the antenna characteristic switching section,

wherein the antenna characteristic switching section performs a predetermined switching on the basis of the notification.

12. (Previously Presented) A radio terminal device according to claim 7, further comprising:

(a) A tilt detector for detecting the tilt angle of the radio terminal device to notify the antenna characteristic switching section,

wherein the antenna characteristic switching section performs a predetermined switching on the basis of the notification.

13. (Currently Amended) A radio terminal device according to claim 7, wherein the antenna characteristic switching section has either of a switch and a coil being connected each other in series, one end of the coil being connected to said antenna element.

14. (Cancelled)

15. (Previously Presented) A radio terminal device according to claim 7, wherein the antenna element is any one of a loop antenna, dipole antenna, and diversity antenna.

16. (Previously Presented) A radio terminal device according to claim 7, wherein the antenna element is a dipole antenna and also an array antenna configured by two antenna elements.

17. - 20. (Cancelled)

21. (Previously Presented) A radio terminal device according to claim 9, further comprising:

(a) an operating pattern estimator for discriminating whether the present communication media is a telephone call or a data communication, to notify the antenna characteristic switching section,

wherein the antenna characteristic switching section performs a predetermined switching on the basis of the notification.

22. - 23. (Cancelled)

24. (Previously Presented) A radio terminal device according to claim 9, further comprising:

(a) a propagation environment estimator for detecting a received power or a polarization and direction of an arrival radio wave, to notify the antenna characteristic switching section,

wherein the antenna characteristic switching section performs a predetermined switching on the basis of the notification.

25. - 26. (Cancelled)

27. (Previously Presented) A radio terminal device according to claim 9, further comprising:

(a) A tilt detector for detecting the tilt angle of the radio terminal device to notify the antenna characteristic switching section,

wherein the antenna characteristic switching section performs a predetermined switching on the basis of the notification.

28. - 29. (Cancelled)

30. (Previously Presented) A radio terminal device according to claim 9, wherein the antenna characteristic switching section has a switch and a coil being connected each other in series, one end of the coil being connected to said antenna element.

31. - 38. (Cancelled)

39. (Previously Presented) A radio terminal device according to claim 9, wherein the antenna element is a dipole antenna and also an array antenna configured by two antenna elements.

40. (Cancelled)

41. (New) A radio terminal device according to claim 7, further comprising:
an anteaenna element that is used in a stand-by mode.

42. (New) A radio terminal device according to claim 7, further comprising:

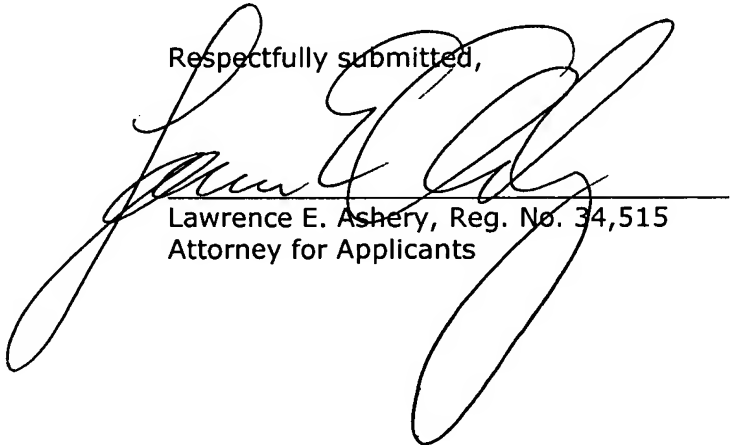
(a) one or more sets paired said antenna with said RF circuit section;

(b) and a splitter which combines the signals from two or more said RF circuit sections, or divides a signal into the respective RF circuit sections,

wherein the splitter connects with the respective RF circuit sections.

43. (New) A radio terminal device according to claim 9, wherein the antenna element is connected with a conductive substrate arranged close in parallel to the long side of the antenna element with a sufficiently small spacing as compared with the wavelength in a twisted position relationship; and the antenna characteristic switching section is connected to one end of the antenna element in the vicinity of the conductive substrate, for changing the state of continuity with the conductive substrate.

Respectfully submitted,


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